

## Analyses of Mössbauer spectra for ferrous and ferric state in Dynabi<sub>Tab</sub>

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Antianemic medicament ferrous gluconate, ferrous fumarate, and a Dynabi tablet with basic iron bearing ingredients were studied using Mössbauer spectroscopy. Room-temperature spectra of ferrous gluconate provided clear evidence that the two phases of iron present were ferrous ( $\text{Fe}^{2+}$ ) as the major phase with a contribution of 91%, and ferric ( $\text{Fe}^{3+}$ ), whose contribution was found to be 9%. In the case of ferrous fumarate, a single phase was detected corresponding to ferrous ( $\text{Fe}^{2+}$ ). The Dynabi tablet consists of ferrous gluconate (91%) and ferrous fumarate (9%). However, the actual values of the contributions of the iron ions in Dynabi<sub>Tab</sub> were shown to depend on the storage temperature of the sample. The ferric phase was increased at high storage temperature of 50 °C.